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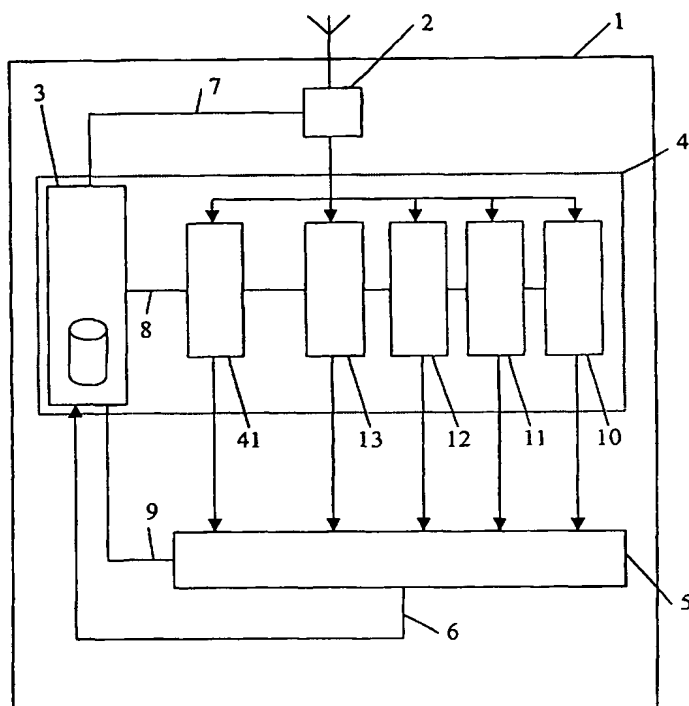
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(54) Title: MOBILE TERMINAL FOR CELL SEARCHING VIA AN ITERATIVE CORRELATION SYSTEM



(57) Abstract: Mobile terminals (1) for searching cells identified by code signals in Time Division - Synchronous Code Division Multiple Access (TD-SCDMA) telecommunication systems comprise correlation systems (4) for correlating input signals with stored code signals. The best correlation result defines the code signal used, which identifies the cell. By providing correlation systems (4) with controllers (3) for controlling correlation systems for performing iterative correlations and adapting correlation parameters per iterative correlation, the computational complexity is reduced much. Said correlation parameter corresponds with the length of code signals, which firstly is to be reduced and then per next iteration is to be increased, and/or with the number of code signals, which per next iteration is to be reduced. Said controllers (3) comprise comparators (5) for comparing correlation results for in dependence of comparison results adapting correlation parameters, and selectors (5) for in response to comparison results selecting a reduced number of code signals to be used for next correlations.

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